

Listing of the Claims:

The following is a complete listing of all the claims in the application, with an indication of the status of each:

- 1 1 (Currently Amended). A surface treatment apparatus comprising:
2 a sheet heating unit which heats a sheet containing at least a
3 thermoplastic resin layer, the sheet being selected from a thermosensitive
4 recording sheet, an inkjet sheet, an electrophotographic sheet, a hot
5 developing sheet, a silver halide photography sheet, and a silver halide
6 digital photography sheet; and
7 a sheet depression and protrusion-forming unit disposed on a
8 downstream process side of the sheet heating unit which forms depressions
9 and protrusions on ~~at least one of the thermoplastic resin layer and the~~
10 ~~image-forming layer.~~
- 1 2 (previously presented). A surface treatment apparatus according to Claim
2 1, wherein the sheet heating unit heats the sheet at a temperature equal to
3 or higher than the softening point of a thermoplastic resin in the
4 thermoplastic resin layer.
- 1 3 (Original). A surface treatment apparatus according to Claim 1, wherein
2 a thermoplastic resin forming the thermoplastic resin layer is a
3 polyethylene resin.
- 1 4 (previously presented). A surface treatment apparatus according to Claim
2 1, wherein the sheet comprises the thermoplastic resin layer and ~~an~~ the
3 image-forming layer on a base, and
4 depressions and protrusions are formed on a surface of the
5 image-forming layer and at an interface of the image-forming layer with
6 the thermoplastic resin layer by the sheet depression and
7 protrusion-forming unit.

1 5 (Original). A surface treatment apparatus according to Claim 1, wherein
2 the sheet depression and protrusion-forming unit forms depressions and
3 protrusions at a temperature equal to or higher than the softening point of a
4 thermoplastic resin in the thermoplastic resin layer.

1 6 (Original). A surface treatment apparatus according to Claim 1, wherein
2 at least one of a depression depth, a protrusion height , and a depression
3 and protrusion surface density can be adjusted.

1 7 (Original). A surface treatment apparatus according to Claim 6, wherein
2 the protrusion height is 10 to 100 μ m, and a depression and protrusion
3 interval is 10 to 300 μ m.

1 8 (Original). A surface treatment apparatus according to Claim 1, wherein
2 at least one of a depression depth, a protrusion height, and a depression
3 and protrusion surface density can be adjusted according to customer
4 specifications.

1 9 (Previously presented). A surface treatment apparatus according to Claim
2 1, wherein the sheet depression and protrusion-forming unit forms
3 depressions and protrusions of different shapes in different parts of the
4 sheet according to an image to be formed on the sheet.

1 10 (Previously presented). A surface treatment apparatus according to
2 Claim 1, wherein the sheet depression and protrusion-forming unit
3 selectively drives plural wires, and depressions and protrusions are formed
4 by giving impacts to the sheet surface with the wires each comprising a
5 depression and protrusion-forming member attached to the end thereof.

1 11 (Previously presented). A surface treatment apparatus according to
2 Claim 10, wherein the sheet depression and protrusion-forming unit is an
3 impact printer head.

1 12 (Original). A surface treatment apparatus according to Claim 1, wherein
2 the sheet depression and protrusion-forming unit is a roller having surface
3 depressions and protrusions against the sheet.

13 (Canceled).

1 14 (Currently Amended). An image-forming apparatus comprising:
2 an image-forming unit which forms a visible image on a sheet, and
3 a surface treatment unit, comprising;
4 a sheet heating unit which heats the sheet comprising at
5 least a thermoplastic resin layer, the sheet being selected from a
6 thermosensitive recording sheet, an inkjet sheet, an
7 electrophotographic sheet, a hot developing sheet, a silver halide
8 photography sheet, and a silver halide digital photography sheet,
9 and
10 a sheet depression and protrusion-forming unit disposed on
11 the downstream process side of the sheet heating unit which forms
12 depressions and protrusions on ~~at least one of the thermoplastic~~
13 ~~resin layer and the image-forming layer~~, the surface treatment unit
14 performing surface treatment of the sheet on which an image is
15 formed by the image-forming unit.

1 15 (Original). An image-forming apparatus according to Claim 14, wherein
2 the sheet heating unit which heats the sheet at a temperature equal to or
3 higher than the softening point of a thermoplastic resin in the thermoplastic
4 resin layer.

1 16 (Previously presented). An image-forming apparatus according to
2 Claim 14, wherein the sheet comprises the thermoplastic resin layer and
3 the image-forming layer on a base, and
4 depressions and protrusions are formed on a surface of the

5 image-forming layer and at an interface of the image-forming layer with
6 the thermoplastic resin layer by the sheet depression and
7 protrusion-forming unit.

1 17 (Original). An image-forming apparatus according to Claim 14, wherein
2 the sheet depression and protrusion-forming unit forms depressions and
3 protrusions at a temperature equal to or higher than the softening point of a
4 thermoplastic resin in the thermoplastic resin layer.

1 18 (Previously presented). An image-forming apparatus according to
2 Claim 14, wherein the sheet depression and protrusion-forming unit forms
3 depressions and protrusions of different shapes in different parts of the
4 sheet according to an image to be formed on the sheet.

1 19 (Previously presented). An image-forming apparatus according to
2 Claim 14, wherein the sheet depression and protrusion-forming unit
3 selectively drives plural wires, and depressions and protrusions are formed
4 by giving impacts to the sheet surface with the wires each comprising a
5 depression and protrusion-forming member attached to the end thereof.

1 20 (Previously presented). An image-forming apparatus according to
2 Claim 19, wherein the sheet depression and protrusion-forming unit is an
3 impact printer head.

1 21 (Original). An image-forming apparatus according to Claim 14, wherein
2 the sheet depression and protrusion-forming unit is a roller having surface
3 depressions and protrusions against the sheet.

1 22 (Previously presented). An image-forming apparatus according to
2 Claim 14, further comprising:
3 a control unit which conducts one of driving and stopping driving
4 the surface treatment unit so as to control an execution of surface treatment
5 of the sheet.